

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14045966
Catalog # : 05012OT3E365T-W40

Frame	: 364/5T	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 116/58.1 A	Protection degree	: IP23
L. R. Amperes	: 779/389 A	Cooling method	: IC01 - ODP
LRC	: 6.7x(Code G)	Mounting	: F-1
No load current	: 40.8/20.4 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1185 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 222 ft.lb	Approx. weight ³	: 777 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 23.9 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	93.5	93.6	94.1	94.1	Max. traction	: 1731 lb
Power Factor	0.48	0.74	0.82	0.85	Max. compression	: 2508 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6212 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	27 g	13 g
Lubricant type	:	Mobil Polyrex EM	

Notes
USABLE @208V 128A SF 1.15 SFA 148A

This revision replaces and cancel the previous one, which must be eliminated.
(1) Looking the motor from the shaft end.
(2) Measured at 1m and with tolerance of +3dB(A).
(3) Approximate weight subject to changes after manufacturing process.
(4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Checked by				
Date	10/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

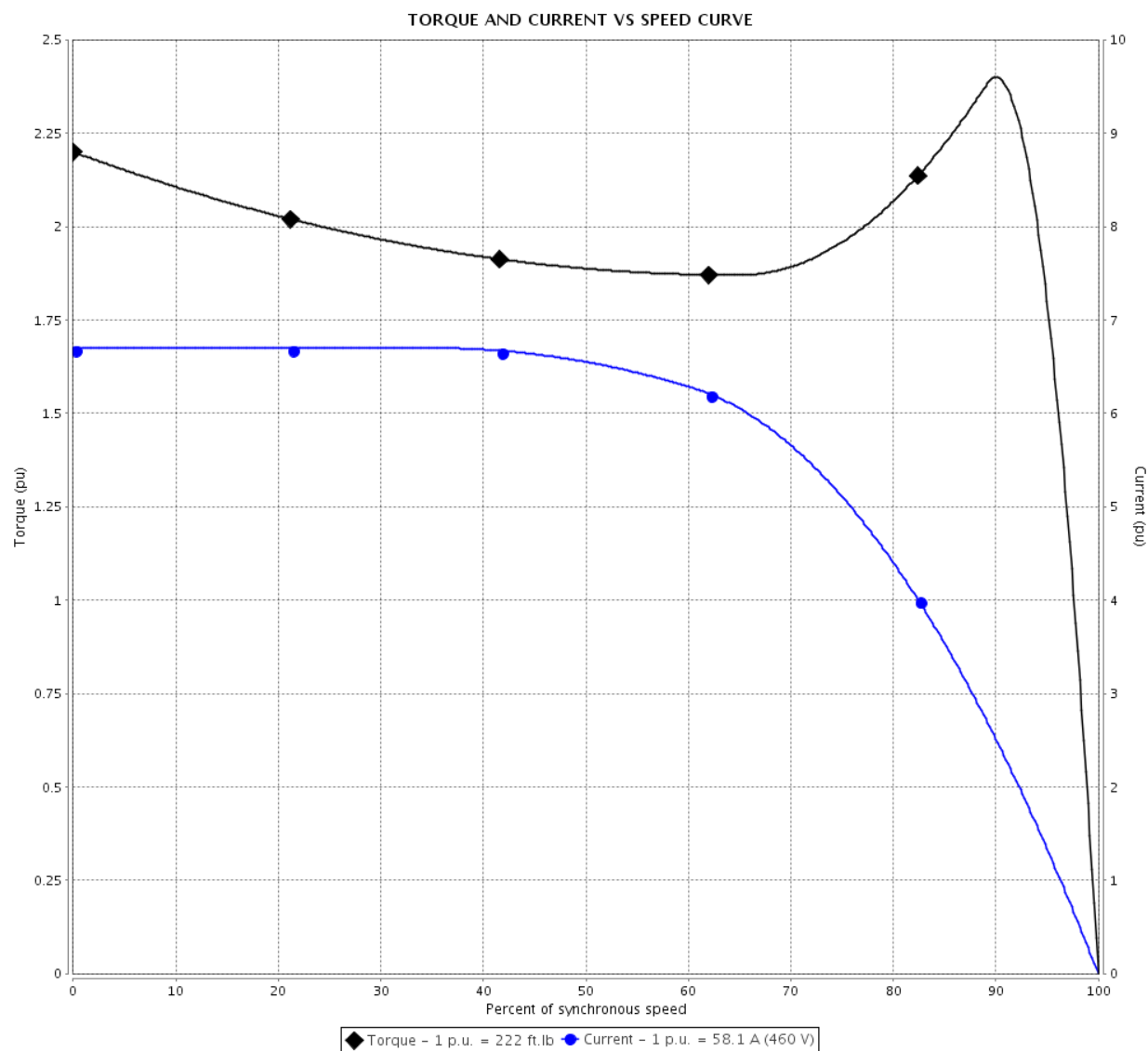


Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14045966

Catalog # : 050120T3E365T-W40



Performance : 230/460 V 60 Hz 6P

Rated current : 116/58.1 A
LRC : 6.7
Rated torque : 222 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 240 %
Rated speed : 1185 rpm

Moment of inertia (J) : 23.9 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Locked rotor time : 27s (cold) 15s (hot)

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Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

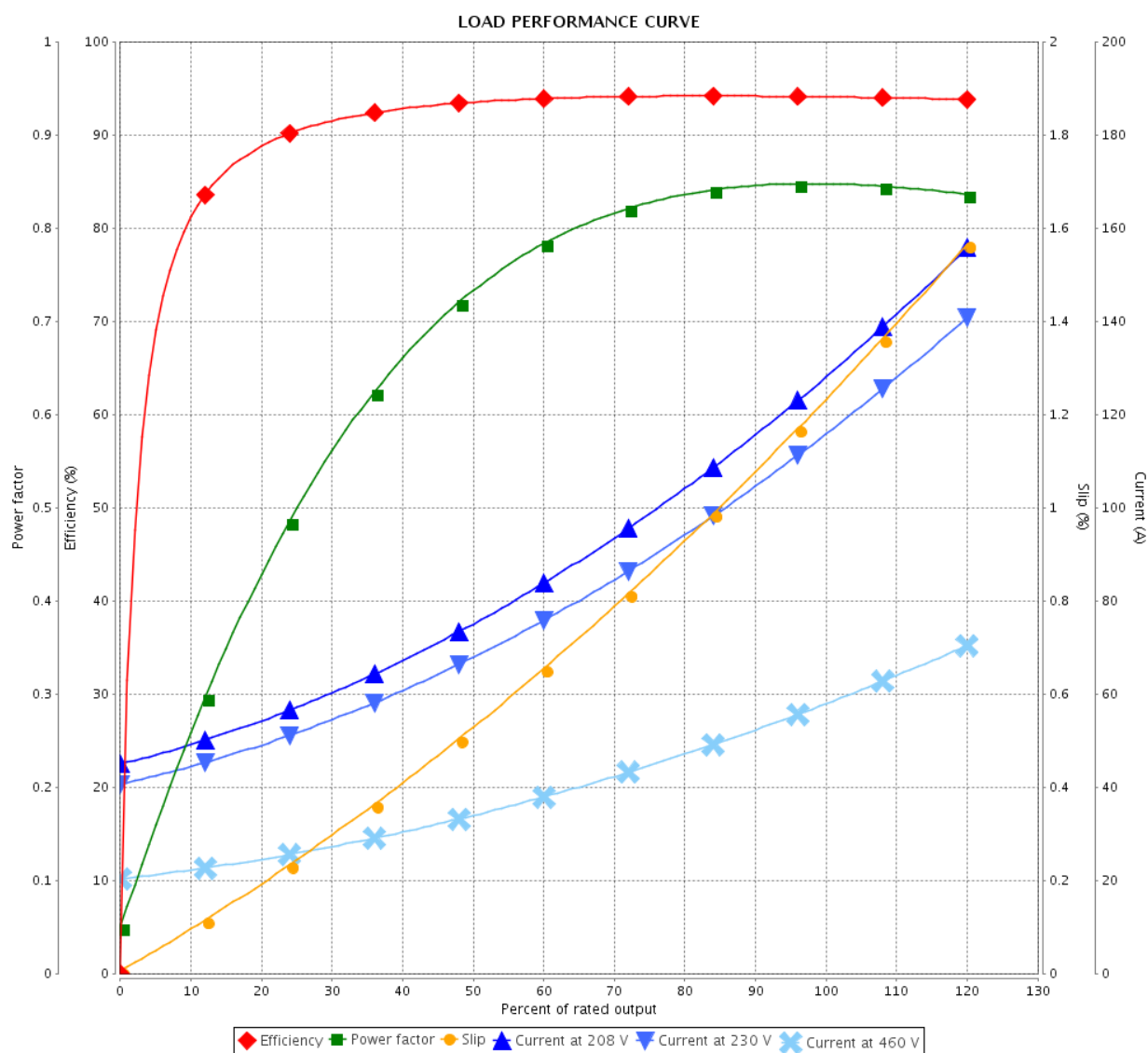


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Three-Phase

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Catalog # : 05012OT3E365T-W40



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Design : B

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THERMAL LIMIT CURVE

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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

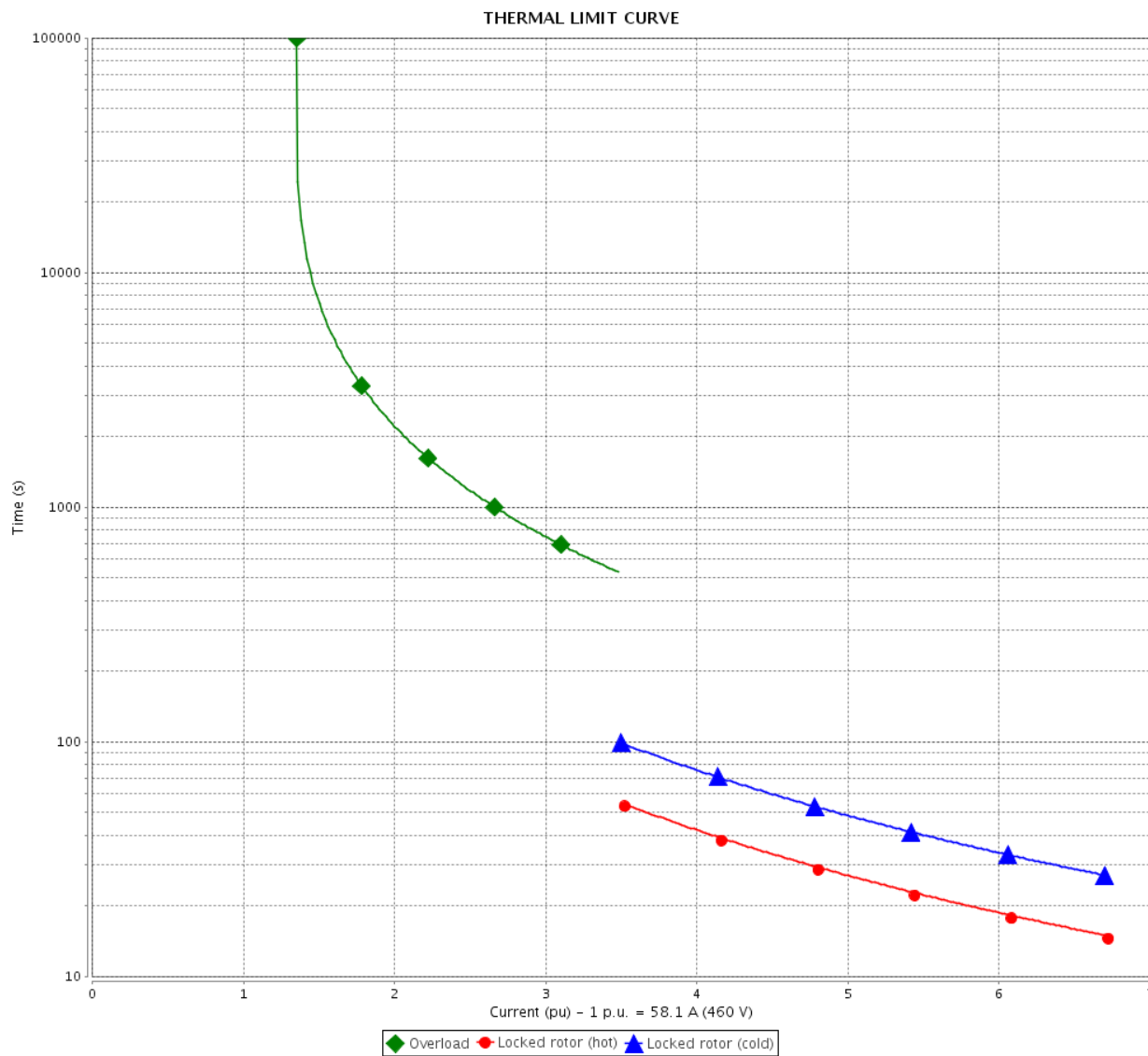
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

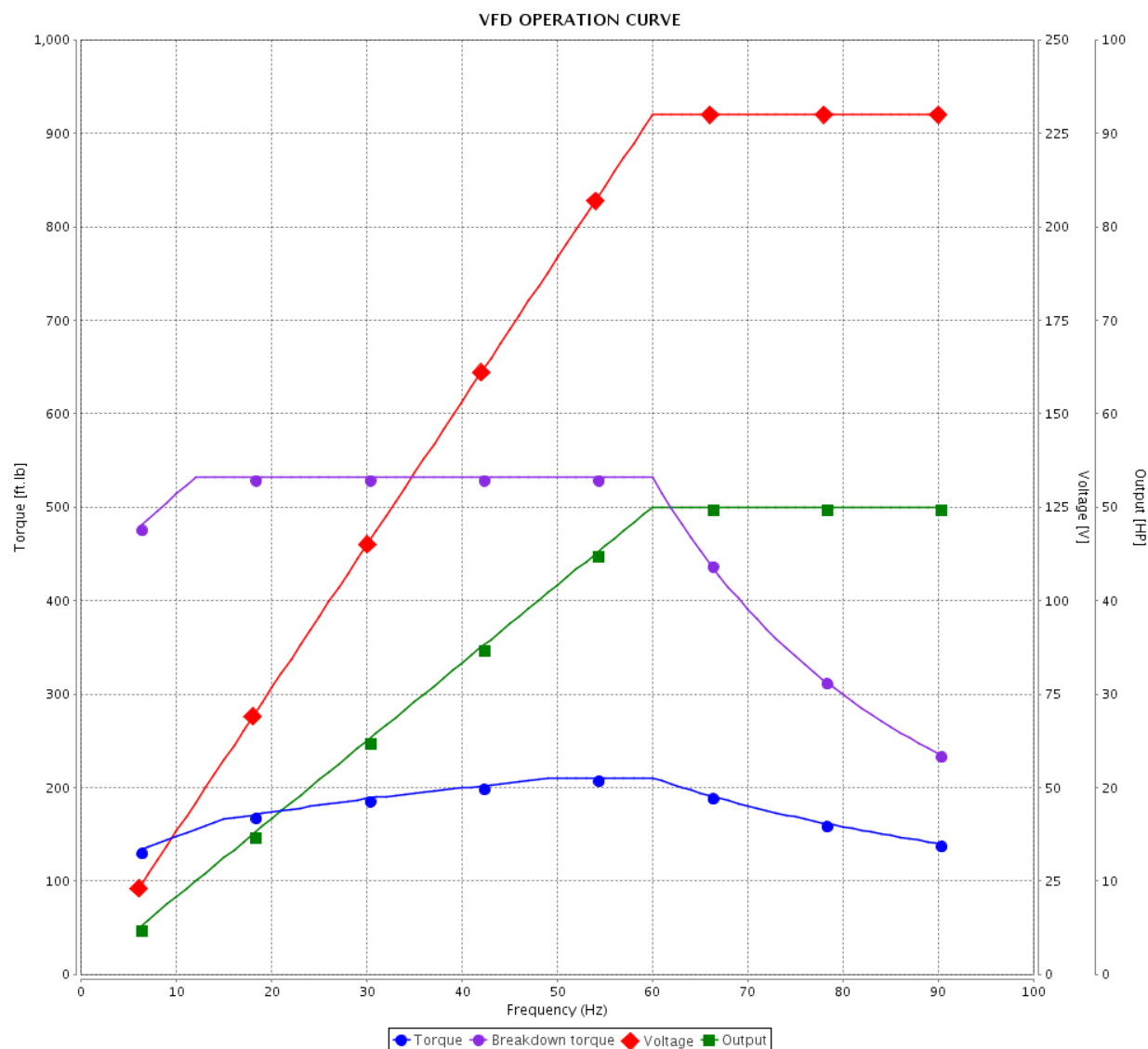


Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14045966

Catalog # : 050120T3E365T-W40

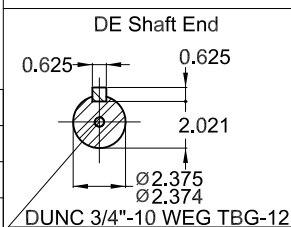
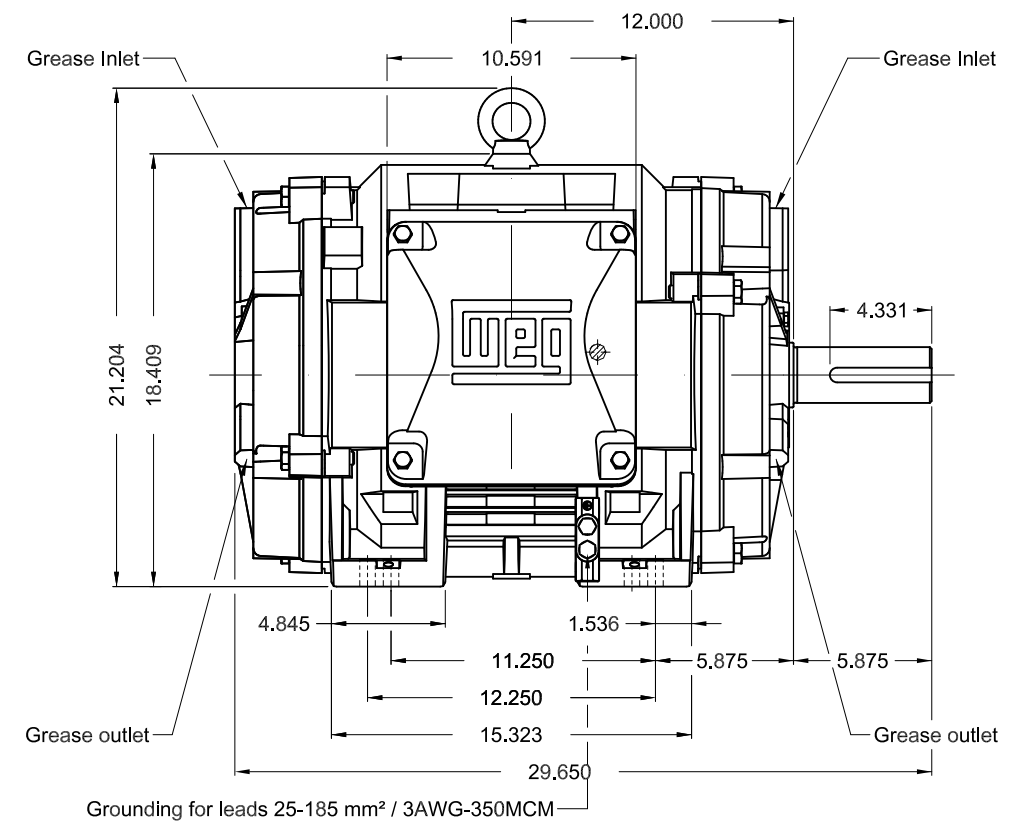
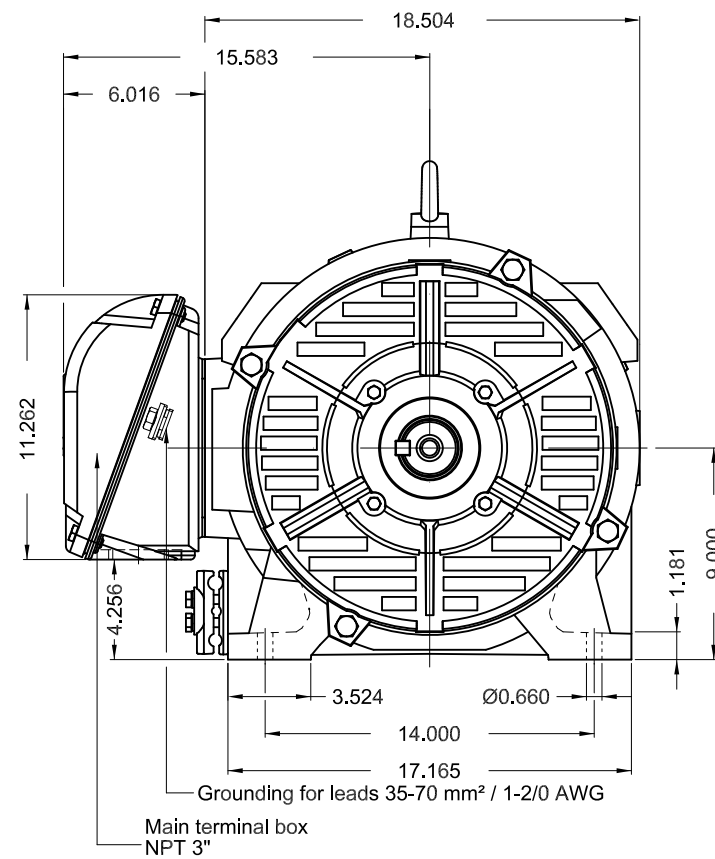


Performance : 230/460 V 60 Hz 6P

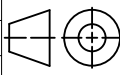

Rated current : 116/58.1 A
LRC : 6.7
Rated torque : 222 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 240 %
Rated speed : 1185 rpm

Moment of inertia (J) : 23.9 sq.ft.lb
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Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)

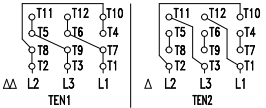

50 HP 06 Poles 60Hz										A
								1:8		
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER		THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 364/5T IP23 ODP				PREVIEW WDD			
CHECKED										
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering		SHEET		1 / 1		



W40 NEMA
Premium®



Severe Duty

PH	FR		HP(kW)		Hz			
V —	A —		RPM		DES —			
NEMA NOM EFF — %			INS. CL. Δ T		K			
ENCL ODP		DUTY			AMB.			
CODE	PF	SF	SFA					
USABLE @208V								
ALT 1000 m.a.s.l.							Lbs	